DRAFT

Washington State Injury and Violence Prevention Strategic Plan 2006 – 2010

The Injury Community Planning Group

and

The Washington State Department of Health

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INTRODUCTION AND BACKGROUND

WHAT IS INJURY?

In public health practice, ***injury*** is damage or harm to the body resulting in impairment or destruction of health.[i] Types of physical injury include: broken bones, cuts, brain damage, poisoning, and burns. Physical injury results from harmful contact between people and objects, substances, or other things in their surroundings.

Definition of intentional and unintentional injury

The intent of injury can be important when determining target audiences and effective interventions and can be used for program planning and evaluation. Injuries can be grouped into two categories identified by the "manner" in which the injury occurs: ***unintentional*** and ***intentional***.

Unintentional injuries, commonly referred to as "accidents," are predictable and can be stopped if preventive measures are put into place. In 2003, unintentional injuries were the leading cause of death for Americans ages 1 to 44 years and the fifth leading cause of death overall. More than 109,000 Americans died in 2003 from unintentional injuries.

Intentional injuries include all forms of violence: suicide (e.g., intentionally self-inflicted), and homicide and assault (e.g., intentionally inflicted by another). There are also preventive strategies for intentional injuries.

Injuries can also be grouped by 'mechanism' or the cause of the injury. Examples of mechanisms of injury include: motor vehicle crashes, drowning, falls, poisoning, falls, firearm, and suffocation.

Definition of violence

Violence is defined broadly as the use of physical force with the intent to inflict injury or death upon oneself or another. [ii]

WHAT IS INJURY AND VIOLENCE PREVENTION?

Just as the occurrence of an injury requires the interaction of several factors, preventing one may require a mixture of countermeasures or interventions (the terms are used synonymously).

In the 1960's, Dr. William Haddon Jr., a physician and engineer, developed one of the earliest attempts to systematize injury prevention measures. Haddon's list of 10 general strategies was designed to conceptualize prevention opportunities. They are as follows:

1. Prevent the creation of the hazard (for example, stop producing poisons).
2. Reduce the amount of the hazard (e.g., package toxic drugs in smaller, safe amounts).
3. Prevent the release of a hazard that already exists.
4. Modify the rate or spatial distribution of the hazard (e.g., require automobile air bags).
5. Separate, in time or space, the hazard from that which is to be protected (e.g., use sidewalks to separate pedestrians from automobiles).
6. Separate the hazard from that which is to be protected by a material barrier (e.g., insulate electrical cords).
7. Modify relevant basic qualities of the hazard (e.g., make the space between crib slats too narrow to strangle a child).
8. Make individuals more resistant to the hazard.
9. Counter the damage already done by the hazard (e.g., provide emergency medical care).
10. Stabilize, repair, and rehabilitate the individual damaged (provide acute care and rehabilitation facilities).

Haddon also developed a matrix that classifies injury by phases and factors.

- ***Pre-event*:** Before the crash (or other injury event). What affects the likelihood that it will occur?
- ***Event:*** During the crash (or other injury event). What affects the likelihood that someone will be injured?
- ***Post-event:*** After the crash (or other injury event). What affects the outcomes once an injury has occurred?

MAGNITUDE OF THE PROBLEM: INJURY AND VIOLENCE IN WASHINGTON STATE -- A PUBLIC HEALTH PRIORITY

Injuries are the leading cause of death and disability for Washington citizens age 1-44, and remain a significant cause of death and disability throughout the lifespan. In 2004, nearly 3,500 Washington residents died due to injuries, and almost 41,000 Washington residents had injury-related hospitalizations. Nearly 65% of deaths among children ages 1-19 are due to injuries.

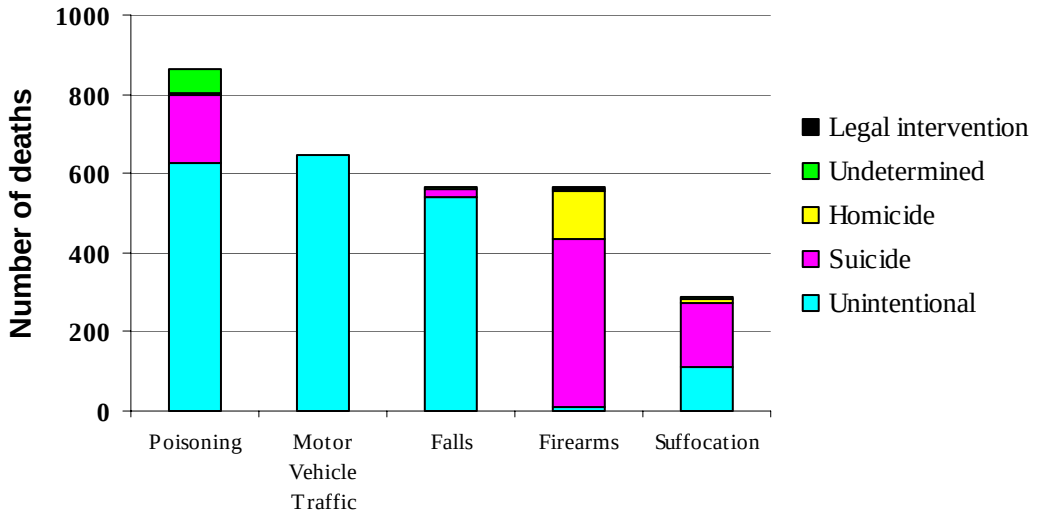
Because injuries and violence disproportionately affect the young, their impact on years of potential life lost (YPPL) is great. By the year 2020, motor vehicle crashes are projected globally to rank second behind heart disease in YPPL, ahead of cancer and HIV.

There are numerous products, practices, and programs that can save lives, but many people have either not heard about them or have not accepted and adopted them. Many people do not see the need to change, do not perceive themselves to be at risk, or do not have access to affordable safety products or programs that could save their lives.

Leading Causes of Death
Washington State 2003

Rank	Age <1	Age 1-4	Age 5-14	Age 15-24	Age 25-44	Age 45-64	Age 65+	Total
1	Congenital Anomalies 120	Cancer 10	Unintentional MV Traffic 26	Unintentional MV Traffic 118	Cancer 340	Cancer 2,813	Heart Disease 9,222	Heart Disease 11,185
2	Sudden Infant Death Syndrome 53	Congenital Anomalies 9	Cancer 26	Suicide 100	Suicide 294	Heart Disease 1,661	Cancer 7,832	Cancer 11,064
3	Short gestation & Low Birth Wt 45	Homicide 8	Unintentional Drowning 11	Homicide 51	Unintentional Poisoning 274	COPD 336	Stroke 3,211	Stroke 3,588
4	Maternal compl of pregnancy 27	Unintentional Drowning 8	Congenital Anomalies 8	Cancer 41	Heart Disease 266	Diabetes 334	Alzheimer's 2,360	COPD 2,648
5	Unintentional Suffocation 9	Unintentional MV Traffic 6	Heart Disease 8	Unintentional Poisoning 39	Unintentional MV Traffic 199	Stroke 324	COPD 2,299	Alzheimer's 2,380
6	Heart Disease 7	Heart Disease 3	Suicide 6	Heart Disease 18	Homicide 91	Cirrhosis 313	Diabetes 1,119	Diabetes 1,509
7	Influenza & Pneumonia 5	Unintentional Suffocation 3	Homicide 5	Unintentional Drowning 17	HIV 89	Suicide 265	Pneumonia/ Influenza 966	Pneumonia/ Influenza 1,086
8	Unintentional MV Traffic 5	Perinatal Conditions 3	Infuenza & Pneumonia 4	Congenital Anomalies 11	Cirrhosis 68	Unintentional Poisoning 226	Parkinson's 472	Suicide 803
9	Homicide 4	Unintentional Pedestrian Other 2	Unintentional Other Transport 4	Unintentional Fall 9	Stroke 53	Unintentional MV Traffic 159	Unintentional Fall 436	Unintentional MV Traffic 690
10	Septicemia 3	Influenza & Pneumonia 2	Unintentional Fire & Burn 2	Diabetes 7	Diabetes 48	Viral Hepatitis 112	Pneumonitis 380	Unintentional Poisoning 549

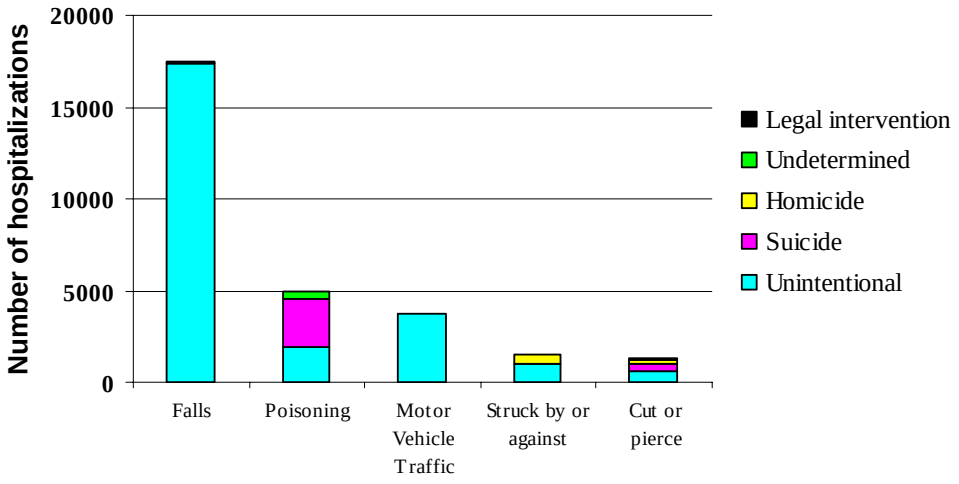
Leading Causes of Injury Deaths
Washington State – 2004



Of the 3,483 deaths due to injuries in Washington State in 2004, about two-thirds (2,326 deaths) were unintentional; about 24% were suicides (823 deaths), and about 6% were homicides (216 deaths). The leading causes of injury-related death include poisoning, motor vehicle traffic, falls, and firearms.

Injury deaths are only part of the picture. In Washington State in 2004, there were 40,865 injury-related hospitalizations. About 84% of injury hospitalizations (34,391) were unintentional; about 8% were suicide attempts (3,309), and about 4% were due to assault (1,431). Falls among older adults is by far the leading cause of injury-related hospitalization followed by poisoning and motor vehicle traffic. Such injuries have a substantial impact on the lives of individuals their families, and society. The physical and emotional effects of injuries can be extensive and wide-ranging, and in the case of disabling injuries, the effects can last a lifetime.

Leading Causes of Injury Hospitalization
Washington State - 2004



COST OF INJURIES

Through premature death, disability, medical costs and lost productivity, injuries significantly impact the health and welfare of Americans. Taken as a whole, injuries, both intentional and unintentional, are the leading cause of death among persons aged 1 to 44 years and the fourth leading cause of death among persons of all ages. Unlike other leading causes of death (e.g., tobacco use and poor diet/inactivity), deaths due to injuries affect the young and old alike. Because of this, the life-years lost due to injuries exceed those that result from other preventable causes.[iii]

Ultimately, injuries that occurred in 2000 will cost the U.S. health care system over $80 billion in medical care costs: $1 billion for fatal injuries; $33.7 billion for hospitalized injuries; and $45.4 billion for non-hospitalized injuries.[iv] In addition, to the medical costs injuries cause losses of productivity which may include lost wages and accompanying fringe benefits, and the lost ability to perform one's household responsibilities. Injuries that occurred in 2000 will cause an estimated $326 billion in productivity losses.[v]

SPECIAL POPULATION GROUPS: HEALTH DISPARITIES

The National Institutes of Health defines health disparities as the "differences in the incidence, prevalence, mortality, and burden of diseases and other adverse health conditions that exist among specific population groups in the United States."

Low-income populations and communities of color disproportionately experience worse health outcomes across a broad spectrum of illnesses, injuries, and treatment outcomes.

According to some experts, "socioeconomic, racial, and ethnic disparities in health status are *large, persistent,* and *ever increasing* in the United States."

While every person is at risk for injury, certain types of injuries affect some groups more frequently. In Washington State, many causes of injury death are generally lowest for Asian and Pacific Islanders and highest for American Indians and Alaska Natives. There are a few exceptions. African Americans have the lowest suicide rate and highest homicide rate, although this latter disparity has decreased since 1990. Whites have a suicide rate similar to that of American Indians and Alaska Natives and a homicide rate similar to that of Asians and Pacific Islanders. Compared to non-Hispanics, Hispanics have relatively high age-adjusted motor vehicle-related death rates and high homicide rates, but they have relatively low rates of suicide. White, elderly females are at highest risk for falls and fall-related injuries.

Many of the race and ethnic disparities in the preceding paragraph are closely linked to income and education because some race and ethnic groups carry a disproportionate burden of poverty and low levels of formal education. The 2000 U.S. Census shows that in Washington, more than 25% of American Indians and Alaska Natives live in high poverty areas (defined as census tracts where 20% of people are at or below the federal poverty level), compared to less than 20% of African Americans and about 10% of Asians and Pacific Islanders and whites. More than 30% of Hispanics live in high poverty areas, compared to about 10% of non-Hispanics. In most public health assessment, race and ethnic group should be viewed as capturing the effects of complex social, cultural, economic and political factors on human health.

People with disabilities or special health care needs are at greater risk for injury than those without. Data from the 2004 Behavioral Risk Factor Surveillance System (BRFSS) survey show that adults with disabilities are significantly more likely to have been physically or sexually abused, have been injured in a fall, and have a loaded firearm in their home.

According to the Injury Prevention for Children with Special Health Care Needs Work Group 1996 study, children with pre-existing limitations in the cognitive, social and emotional categories had a significantly higher rate of injury than their peers without limitations. Studies done at Northwestern University (Chicago), Feinberg School of Medicine and published in 2002 Journal of Medicine and Rehabilitation Clinics of North America found an urgent need to address injury prevention and to improve safety standards for children with disabilities.[vi]

Data from the 2004 Washington State Healthy Youth Survey show that 10th grade youth with disabilities were significantly more likely to be bullied, be in a physical fight, report symptoms of depression, attempt suicide, and carry a weapon at school compared to youth without disabilities.

By understanding the unique needs of people with special needs and disabilities, injury prevention planning can identify resources and interventions that are effective toward eliminating health disparities in our population.

THE ROLE OF ALCOHOL AND OTHER DRUGS

The role alcohol and other drugs plays in injuries and violence cannot be ignored and requires specific attention. The influence of alcohol and other drugs can be measured across virtually all types of injuries. The link between alcohol and other drugs and violence, motor vehicle trauma, self-harm, drowning, poisoning, falls, and suffocation has been well established. Alcohol and other drugs need to be viewed as an issue that cross-cut other areas within the Plan considered for action.

FUTURE TRENDS

Cross-disciplinary collaboration

It is encouraging that cross-disciplinary collaboration seems to be on the increase. Such interactions can only strengthen the impact and reach of all parties.

Technological advances

Technological advances have brought other promising opportunities. Interactive multimedia offer many advantages over traditional communication channels. They allow customizing information, can increase two-way communication and provide feedback in real time, and they can communicate complex concepts more effectively.

Also, mass media may help to create an environment conducive to injury prevention. Comprehensive injury prevention campaigns that include media have had demonstrable successes. Media messages may reinforce prevention messages for individuals exposed to other prevention strategies.

Community models and approaches for interventions

Historically, the injury epidemic had been largely viewed as an individual-level health occurrence. This perspective has dominated injury prevention approaches. Over time, there has been an incremental shift in research from the individual to the physical environment. Most recently, there has been a growing recognition of the need for a comprehensive approach that integrates strategies.

Community-level interventions may promote, sustain, and amplify injury preventive behaviors by providing individuals with information and skills in a supportive environment.

Safe Communities is an approach to injury prevention and safety promotion that is supported by the World Health Organization (WHO). The safe community model seeks to understand injury and intervene at a community level.

Strategies that sustain injury prevention behavior

Data suggest that the positive effects of interventions fade over time. One strategy that looks promising is the use of "social marketing" or media interventions to reinforce prevention messages and to sustain behavior change.

BACKGROUND -- DEVELOPMENT OF WASHINGTON STATE'S INJURY AND VIOLENCE PREVENTION STRATEGIC PLAN

In August, 2004, the Washington State Department of Health (DOH) Injury & Violence Prevention Program received a 5 year Public Health Injury Surveillance and Prevention Program Grant from the Centers for Disease Control (CDC). The purpose of the grant was to enable state public health agencies to develop or strengthen their ***organizational focus*** related to the prevention and control of injuries and to develop and strengthen their ***injury surveillance*** programs.

To achieve the purpose of the grant, several activities were identified by CDC including the need to:

(1) build a solid infrastructure for injury prevention and control
(2) mobilize support and build partnerships
(3) develop and market a state injury prevention and control plan
(4) establish priorities and select appropriate evidence-based intervention strategies.

A COMMUNITY PLANNING PROCESS

One of the core components of the grant, to mobilize and build support, was in part to establish an advisory group external to DOH called the Injury Community Planning Group (ICPG). The DOH invited 15 experts from private, public, professional, and nonprofit injury and violence prevention control organizations around the state to become members of the ICPG.

The ICPG held meetings beginning in December, 2005 through June, 2006 to identify and prioritize injury and violence problems within the state and to earmark effective and promising prevention strategies.

In addition to identifying key elements of the Washington State Injury and Violence Prevention Strategic Plan, DOH and the ICPG are sponsoring two Symposia, being held in Seattle and Spokane in July 2006, to gather input on the Plan and to learn of local strategies from their state and tribal partners, and from other injury and violence prevention stakeholders across the State.

Feedback from the Symposia and from other members of the injury and violence prevention community will be incorporated into the final Plan to be presented at a state-wide meeting in October 2006.

THE INJURY COMMUNITY PLANNING GROUP'S CRITERIA AND GUIDING PRINCIPLES

In prioritizing the State's Goals for 2006-2010, the ICPG used the following criteria:

- Is it a leading cause of death and hospitalization?
- Is there reason to believe it is significant, but under-represented in data?
- Is it a leading cause of years of potential life lost?
- Does it target the most effective interventions (one which creates the greatest reduction)?
- Does it disproportionately affect a particular population?
- Does it have significant direct/indirect associated costs?

The ICPG chose two of the top four priorities, Falls Among Older Adults and Motor Vehicle-related injuries, because they were, respectively, the leading causes of injury-related hospitalization and trauma in the state. Poisoning was chosen because it is a leading cause of unintentional injury-related death and unintentional hospitalization and because the death rates have increased significantly (by 345%) from 1990 – 2004. Violence Against Women was chosen as one of the top four priorities for the state because while it is a major health concern, it is an area for which there is insufficient consistent and accurate information and for which there are no current proven strategies for intervention. It was selected to highlight the magnitude of the issue, and bring it to the forefront. [vii]

As priorities, Falls Among Older Adults, Motor Vehicle-related injuries, Poisoning and Violence Against Women, all disproportionately affect particular populations: older adults, young males, males between 35 – 54 years of age, and women and girls, respectively.

In addition to selecting criteria for prioritization, the ICPG identified and used the following Guiding Principles to direct their work.

- The belief that injuries are predictable, and, therefore, can be prevented
- Strategies need to be evidence or data-based, proven and/or promising
- Important components in the Plan need to include:
    - community involvement
    - building capacity
    - building partnerships and coalitions
    - identifying and including disparities
    - evaluation of strategies

THE INJURY COMMUNITY PLANNING GROUP's VISION AND MISSION STATEMENTS

The Injury Community Planning Group developed the following vision and mission statement to guide them in their work.

Vision

Reduce death and disability associated with injury and violence in Washington State.

Mission

To provide leadership, resources, and information to broad-based partners for injury and violence prevention throughout Washington State.

To advance this mission, our group engages in activities to:

- Develop a comprehensive statewide plan for injury and violence prevention providing information on research-based best practices and promising interventions
- Help build sustainable partnerships within Washington's injury and violence prevention community
- Increase awareness of injury and violence as a public health problem
- Enhance the capacity of partners to conduct research, collect and analyze data, and provide services on injury and violence prevention and control in our communities
- Support public health policies designed to advance injury and violence prevention.

ICPG Members

- Tizzy Bennett, Children's Hospital & Regional Medical Center
- Luann D'Ambrosio, Assistant Director, Northwest Center for Public Health Practice
- John Erickson, Special Assistant, Public Health Emergency Preparedness and Response, Department of Health
- Katharine Fitzgerald, Children's Hospital & Regional Medical Center
- Annie Goodwin, RD, CD, Benton-Franklin Health District

- Tony Gomez, RS, Manager, Violence & Prevention Section, Public Health: Seattle and King County
- David Grossman, MD, Medical Director of Preventive Care, Group Health Cooperative
- Lydia Guy, Washington Coalition of Sexual Assault Programs
- Margaret Hobart, PhD., Fatality Review Project Advisor, Washington State Coalition Against Domestic Violence
- Christi Hurt, Associate Director, Washington Coalition of Sexual Assault Programs
- Kimquy Kieu, MD, MPH, Medical Officer, CMS-DQI-Western States
  Karin Knopp, Injury Prevention/Environmental Health Officer Portland Area Indian Health Service
- Charlie Mock, MD, Director, Harborview Injury Prevention Research Center
- Angie Ward, Program Manager, Washington Traffic Safety Commission
- Liz Wilhelm, Committee for Children
- Sally York MN, RNC, Clinical Coordinator, NorthWest Orthopaedic Institute

USE OF HEALTHY PEOPLE 2010 OBJECTIVES

Healthy People 2010 is a document that provides national health promotion and disease prevention objectives. These objectives were developed by the U.S. Department of Health and Human Services, incorporating input from federal, state, and local agencies and extensive public comment.

The reader must be careful when assessing Washington State relative to the national goals. First, many of Washington State's indicators are not identical to the indicators used in the national goals in some cases because there is no comparable data. Second, *Healthy People 2010* objectives are not always consistent with each other, because coding and other conventions have changed**.** Finally, Washington State has the advantage of collecting hospitalization data, which is not uniformly available in all states, and was therefore not used as a measure in Healthy People 2010.

USE OF LOGIC MODELS

The term "logic model" represents the basic elements which communicate the logic or rationale behind a plan, initiative, or program. Logic models are useful for all parties involved in a planning and implementation process. Logic models can convey: (1) the fundamental purpose of the plan, (2) what will result from the plan, and (3) the actions and resources expected to lead to the desired results.

To see the overall picture for each leading cause of injury, the one-page logic models in this Plan convey relationships between resources, activities, knowledge and capacity needed, and short and long-term outcomes. The logic models are designed to be used in

planning, obtaining resources (e.g., through grant writing), marketing, building partnerships and coalitions, implementing activities, and in evaluation.

HOW THE PLAN IS TO BE USED

The Injury Community Planning Group envisioned the Plan to be used by many audiences involved in injury and violence prevention. The target audiences included:

- Professionals in the health care system
- Community planners and coalitions
- Families and caregivers
- Policymakers
- Governmental agencies, organizations, and tribal governments
- Private organizations
- Nonprofit organizations
- Businesses
- Research and academic institutions
- Media
- Injury care providers
- Insurance companies/payers
- Individual citizens

The Plan was developed as a "call to action" for the State. The Plan includes information for planning, goal-setting, marketing, coalition building, and implementation of best practices and promising strategies at the State and local levels.

The Plan was also designed to be used as a resource guide and a "toolkit" for communities and coalitions who want to implement recommended strategies. The Injury Community Planning Group wanted the Plan to be a dynamic, usable, and "working" document that was meant to be updated regularly for ongoing, viable use by all in the State. The Plan was intended to be used to increase awareness, build capacity, educate and inform, to increase skills and to empower Washington citizens to create a healthier and safer state.

WASHINGTON STATE'S PRIORITIZED GOALS FOR 2006 - 2010

In June, 2006, the ICPG identified the following four causes as priorities for the injury and violence prevention community:

- Falls Among Older Adults

- Motor Vehicle – Related Injuries and Deaths
- Poisoning
- Violence Against Women

The ICPG also identified the following areas as significant:

- Child Maltreatment
- Drowning
- Falls
- Fire and Burn
- Firearm-Related
- Homicide and Assault
- Occupational Injuries
- Suicide
- Suffocation

References

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[iv] Ibid. p. 57.
[v] Ibid. p. 98.
[vi] Gaebler-Spira, D. et al., Injury Prevention for Children with Disabilities, Phys Med Rehabilitation Clinic N. America, 2002 Nov;13(4):891-906.
[vii] U.S. Department of Health & Human Services, Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, Intimate Partner Violence Surveillance, Uniform Definitions and Recommended Data Elements, Atlanta, Georgia, 1999.